



# **TEACHING LEARNING CENTRE**

Ramanujan College (Accredited Grade 'A++' by NAAC) University of Delhi

in collaboration with

#### SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE

under the aegis of Nagpur Shikshan Mandal (NSM) Nagpur

is organising an

Online Two-week Interdisciplinary Refresher Course

# ADVANCED RESEARCH METHODOLOGY

23 October - 06 November 2023

organised under the aegis of

Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Ministry of Education

Call for Registration and Participation

## RAMANUJAN COLLEGE

Ramanujan College, a constituent College of the University of Delhi was established in 1958 as an evening college. The College has been accredited Grade "A++" by the National Assessment and Accreditation Council (NAAC) in its Second Cycle.

At present, Ramanujan College offers sixteen undergraduate programmes in different disciplines. Besides this, the college has been awarded the DDU KAUSHAL (Deen Dayal Upadhyay – Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood) Kendra (2016) by UGC and Teaching Learning Centre (2017) by the Ministry of Education. The College also offers short-term diploma, certificate, and executive development programmes on contemporary and skill-oriented themes to complement the regular graduation courses. It is also the Study Centre of School of Open Learning (SOL), Non-Collegiate Women Education Board (NCWEB) and Indira Gandhi National Open University (IGNOU) for various courses.

In 2018, the College conducted a Course on Human Rights, Environment and Ethics through its National Resource Centre (NRC), under the Annual Refresher Programme in Teaching (ARPIT) scheme of MoE. The College has also entered into Memorandum of Understanding(s) with foreign universities. It is also working for collaboration with other higher education institutions located in remote areas of the country, under the Vidya Vistar Scheme of the



# TEACHING LEARNING CENTRE RAMANUJAN COLLEGE

Teaching Learning Centre (TLC) is mandated by the Ministry of Education (MoE) to organise Faculty Development Programmes (FDPs), Faculty Orientation and Induction Programmes (FIPs), discipline specific and interdisciplinary Refresher Courses, conferences, workshops, through offline and online modes. These programmes are based on indepth subject knowledge, quantitative and qualitative research methodologies, and on an interdisciplinary approach as is envisaged in the National Education Policy (NEP), 2020.

The TLC, Ramanujan College has been set up with the aim of "Reaching the Unreached" teachers in terms of regional diversity and geographically remote areas of the country. It has successfully conducted more than hundred learner-centric programmes since October 2017 and trained over one lakh teachers across the country in various discipline specific and interdisciplinary programmes.

In the TLC Programmes distinguished and internationally acclaimed resource persons deliver lectures and conduct sessions on wide ranging disciplines/topics of relevance in the contemporary and ever evolving global scenario to benefit the teaching fraternity, corporates and researchers. The sessions are also uploaded for larger audiences on the official YouTube Channel of the College.

Ramanujan College is a pioneer in offering offline/online courses for faculty members of higher education institutions and research scholars through the customised Learning Management System (LMS), designed by the College's Research Development and Services Cell. It is predominantly participant-friendly and incorporates evaluation methods and comprehensive feedback systems to judge learning outcomes. The LMS is hosted on CLOUD with high scalability and reliability. The College has installed its own Cloud Infrastructure to host its servers for research and data analysis

# SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE, NAGPUR

Shri Mathuradas Mohota College of Science, Nagpur run by Nagpur Shikshan Mandal (NSM), was established in 1949 and is one of the most reputed and prestigious organizations in Nagpur. The college has been affiliated with Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur since 1967–68. The college offers basic programs with wide academic flexibility of subject combinations at the undergraduate level in science faculty. The college is among the top colleges in central India. The college is now reaccredited by NAAC with an 'A+' grade in the IV cycle.

The college imparts science education to the students who come from urban as well as rural areas in Vidarbha and from states around Maharashtra. The college provides a safe and conducive atmosphere with excellent teaching and learning facilities. The management of the college with the assistance of the faculty and supporting staff is committed to the progress of the college.

The teaching faculty of the college is well-qualified and carries out good quality research as well. The management of the college is always positively inclined towards quality of education and research. The college has collaborated with other institutes in India and abroad to organize international conferences. In the last few years, we have also efficiently organized seminars and workshops for the academic upliftment of the faculty.

Recently, Zoology and Botany laboratories have been recognized as "Place for Higher Learning and Research" by R. T. M. Nagpur University, Nagpur. Laboratories of Chemistry and Physics already possess this status. Major and minor research projects have been sanctioned to the faculty members by various funding agencies.

The college has made further progress with regard to academic, co-curricular, and extracurricular activities. By representing the university at various national and international cultural events, the college's students have received accolades and laurels. In addition to undergraduate courses, the college also offers postgraduate courses in Botany, Chemistry, Computer Science, Mathematics, Physics, and Zoology. The college has initiated career-oriented programs and short-term certificate courses as well.

Our management, teaching faculty, and supporting staff strive for the all-round development of the students. We continuously try to recognize and unfold the talent of the students by giving them the required assistance and the most needed environment for transforming a person into a personality.



# **CONCEPT NOTE**

The Refresher Course is a comprehensive online program designed to equip participants with the necessary knowledge and skills to excel in the field of research. The course aims to explore different dimensions and paradigms of research, enabling participants to undertake independent research in a systematic and well-planned manner. By enhancing their research capabilities and providing them with essential tools and techniques, the course empowers participants to produce high-quality research outputs and contribute to the advancement of their respective fields.

#### **OBJECTIVES:**

- 1. **Enhancing Research Skills**: The primary objective of this refresher course is to enhance participants' research skills by providing them with a deep understanding of advanced research methodologies. Participants will learn how to conduct comprehensive literature reviews, design effective questionnaires, collect and analyze data, and apply simulation techniques. These skills will enable them to undertake independent research projects with confidence and precision.
- 2. Writing for Scholarly Publications: Another key objective of the course is to develop participants' proficiency in writing research papers for good quality journals. Participants will learn the art of effective scientific writing, including the structuring of research papers, presenting results, and citing relevant literature. The course will also emphasize the importance of maintaining academic integrity and preventing plagiarism.
- 3. Software Applications for Research: In today's digital age, research often involves the use of software applications for data analysis, visualization, and presentation. The course aims to train participants in different software tools and facilitate their application in research and teaching-learning methods.

## **THEMATICS**

- Introduction to Research: Research Philosophy & Types
- Research Design and Types
- Data collection and Data Visualization
- Analysis of Data and Techniques
- Systematic Literature Review and Meta Data Analysis
- Introduction to different Qualitative Research Methods
- Developing an understanding about Qualitative and Quantitative Data Analysis
- Writing Research Report and Research Papers using LaTeX
- Advanced Searching Tools and Referencing Tools
- Scientific Journal Finder
- Indexing and Impact Factors
- Publication Ethics: Patent, Copyright and Plagiarism

# **EXPECTED LEARNING OUTCOMES**

After successful completion of the online course, the participants will be able to:

- Gain better understanding on how to identify a research problem and design a valid research project to answer specific research questions
- Get hands-on training in the usage of several open source tools that can assist them in their research endeavors
- Write effective research papers and thesis in the journal designated formats using online tools
- Know the process of finding good quality journals for research and publishing

#### REGISTRATION AND PAYMENT PROCESS

#### **ELIGIBILTY**

Faculty members (regular/adhoc/temporary) in teaching profession, research scholars and postgraduate students are eligible to apply for this programme.

All those who meet the eligibility criterion are required to register and pay a Non-Refundable fee of INR 1450/- by visiting

# rcmoocs.in

#### REGISTRATION DEADLINE: 22 October 2023

After successful registration & payment, the participants will receive a confirmation via email. Please keep checking the spam folder of the email as the bulk email sent may end up in the spam folder. An official group has been made for communication with the participants on "Telegram." You are therefore requested to install the Telegram App either from the Play Store or App Store. The link to join the official group will be provided in the confirmation mail.

#### **IMPORTANT:**

- Registration is mandatory for participation.
- Attempting and submitting all the quizzes and assignments is mandatory, and each participant should score atleast 50% aggregate to be eligible for the completion certificate.
- Graded certificates on the basis of performance will be awarded to the participants.

- As part of the Ministry of Education's requirement under the PMMMNMTT scheme, all participants need to submit online feedback for each session.
- No Objection Certificate (NOC) or Leave is NOT REQUIRED to participate in the Programme. However, participants are expected to inform their authorities about their participation.
- Failing to meet any of the above conditions will result in the denial of completion certificate.

For further information, write to us at: <a href="mailto:fdpos@ramanujan.du.ac.in">fdpos@ramanujan.du.ac.in</a>

or contact us through WhatsApp:

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#### ORGANISING BOARD OF THE PROGRAMME

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